

To Mr. Francisco Guzman
Strategic Water Planning Branch
Statewide Integrated Water Management
California Department of Water Resources

21 January 2019

Dear Mr. Guzman:

I have reviewed the California Water Plan Update 2018 with great interest. I am not a water professional, but I have had an extensive career in both the Federal government and the private sector. I served as a Deputy Assistant Secretary of the Department of Energy and as Deputy Manager of Power of the Tennessee Valley Authority. Subsequently I helped found and grow AES, an electricity producer and distributor in the US and 24 other countries, now a seven billion dollar public company listed on the New York stock exchange.

I have resided in California for the last five years, and spent time getting more familiarity with the water industry in the state. It is not an easy industry to understand. Most of the comparisons and comments which follow are therefore based on my good understanding of the electricity industry in particular, and the global energy industry in general. Please forgive any bias.

1. Where are the price and cost data? I cannot understand why no one ever mentions the price or cost of water. Perhaps I missed it, but in the entire document, I find the words "cost" mentioned twice on page 4-9 and the word "price" not mentioned at all. There is no discussion of what water costs now to consumers; there is no discussion of how the various activities discussed/recommended will change the cost of water to consumers, nor whether this is even a problem? Where is historic data on cost and price? Where are the projections? How can you propose \$90 billion of state funding (page 4-2) and not explain what that will do to water rates? I have been conscientiously paying my residential water bill in Encinitas for 5 years, so I am pretty sure that there's cost in there somewhere, and I know at least what the price of water is for my small part of California. Why is it not a concern for something called a California Water plan? Shouldn't the

various actions proposed be traded off against each other based on the impact on water cost?

2. It has been very difficult to find supply and demand information. The Plan does at least outline these numbers (pp 1.5 to 1-7) and that is reassuring. However...the latest data cited are for 2015. Unless I am mistaken, it is now 2019. The ensuing three year gap has had both drought and generous supply, potential dam failure, and more data and understanding on the impacts of climate change on water. Who has the 2016, 2017, and 2018 data, and why is it not used? I have queried my local supplier and he assures me that they do know how much water Encinitas used every month and every year, and they send lots of reports off to various state offices, but he has no idea what becomes of it. I assume that the other 400+ water distributors do the same thing. And I am betting that Federal water project and the state water project have up to date data as well. So why is there this huge time gap? The data exists and is current, why are we planning based on 2015?
3. Why do we make a plan only once every five or six years? 2013 seems rather a long time ago, even farther back than 2015. Shouldn't we plan more than once every five or six years? This is not acceptable in today's world.
4. This is not a plan. Most "plans" for large enterprises that provide a good or service that I am familiar with have forecasts, and routinely (certainly more frequently than every five years) explain:
 1. Here's is where we are now, with supply, demand and price of our product(s)
 2. Here is where we will be in whatever the planning horizon is, 5 years or 2 years or 10 years, if we do nothing but what we are now doing, usually called a "business as usual" case.
 3. Here is what we are going to change, add, subtract, modify, etc., and here is how the forecast of the future will be different (hopefully better) because of that.

I can't find anything like 2 or 3 in the plan, and 1 says nothing about price.

And yet, and yet—changes are clearly coming, and we know some of them. What will the impacts of Sigma be? What will the impacts of the residential water standards be? What about the money that we're going to spend on new dams and reservoirs? What impact will raising Shasta dam have? Can we at least hazard a guess about what climate change will do in the next five years—rainfall more concentrated, snowfall less, wildfires more—at least say something. We have passed these laws, and we have studied the goodness out of climate change, didn't we think these laws would make a difference and these studies help us plan for the future?

5. The goals and actions are not measurable. Just look at the initial words in each goal and action in Chapter 3. For the six goals we have two "improves", and one each of strengthen, restore, empower, and support. Nothing that can be measured. The Recommended Actions are no better. Three "address", three "improve", two "facilitate" and one each of support, promote, engage, incorporate, streamline, coordinate (my personal favorite), bolster (second favorite), develop, expand and explore (third favorite). Somehow a "quantify" also snuck in. I am sure these are all good ideas of some sort, well maybe not the "coordinate," but they are signals of sloppy thinking and good intentions, not of aggressive management with measureable actions to accomplish clear results.
6. Chapter 4, "Investing in Water Resource Sustainability" is a waste of time. It purports to discuss "the additional funding needed to implement the recommended actions in Chapter 3."(page 4-1) Then it fails completely to distinguish between ongoing actions and new actions, and the appropriate costs of each. Of course, since costing out "bolster" and "improve" and "coordinate" without any metrics is impossible, what the chapter does conclude is that the state should keep spending about 2 billion per year, as it does now, for the next fifty years. Will things then have been bolstered or improved or coordinated? There is no way to tell in this document.

The chapter then lurches into a discussion of alternate funding sources, strangely called "novel funding mechanisms" (page 4-6), and lists four approaches only two of which could be called "novel" by any stretch of the imagination. Water markets are novel? Water surcharges on rates are novel? Really?

In conclusion, this is a badly flawed document. It uses elderly data, it makes no useable forecasts of the benefits or costs of new initiatives, and the cost discussion is of very little use. The state of California and its residents really deserve more current and more complete plans and planning for its water supply than this effort delivers.

Sincerely,

Robert Hemphill



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Investing in water and energy

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